

## **ABSTRACT**

In accordance with a first aspect of the present invention, there is provided a method for detecting a defect on a portion of an element comprising the steps of : acquiring an image of said portion; analyzing said image to highlight problematic regions of said portion; calculating a probability that said problematic region is a defect; if said probability is higher than a threshold value, determining a position of said defect on said element. Another method for classifying a defect on an element is provided. The method comprises: acquiring an image of said defect; calculating a probability that said defect corresponds to one of a series of types of defects; if said probability is higher than a threshold value, determining that said defect is a defect of that particular type. Another method for recommending a most suitable rehabilitation technique for a defect is provided. The method comprises: identifying a series of parameters corresponding to said defect; calculating a relative utility for each of a series of potential rehabilitation techniques using rehabilitation profiles; determining a most suitable rehabilitation technique for said defect corresponding to a highest value of said relative utility.